I CLAIM:

1. A method of providing visual caller identification, comprising the steps of:

saving a plurality of directory numbers;

receiving a call, the call being associated with a directory number;

querying a database for caller identification information associated with the call;

sending the caller identification information to a caller identification device;

comparing the directory number associated with the call with the plurality of directory numbers;

if one of the plurality of directory numbers matches the directory number associated with the call, displaying a first visual identification indicator, and displaying the caller identification information associated with the call;

if one of the plurality of directory numbers does not match the directory number associated with the call, displaying a second visual identification indicator, and displaying the caller identification information associated with the call; and

if no caller identification information associated with the call is obtained during the step of querying a database for caller identification information associated with the call, displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available.

2.　The method of claim 1, wherein displaying a first visual identification indicator, and displaying the caller identification information associated with the call, further includes:

illuminating a first colored light, and

displaying the caller identification information on a readable display screen of the caller identification device.

3.　The method of claim 2, wherein illuminating a first colored light includes, illuminating a green light during displaying the caller identification information.

4.　The method of claim 3, wherein illuminating a first colored light includes, flashing a green light during displaying the caller identification information.

5.　The method of claim 2, wherein displaying a second visual identification indicator, and displaying the caller identification information associated with the call, further includes:

illuminating a second colored light, and

displaying the caller identification information on a readable display screen of the caller identification device.

6.　The method of claim 5, wherein illuminating a second colored light includes, illuminating a yellow light during displaying the caller identification information.

7.　The method of claim 6, wherein illuminating a second colored light includes, flashing a yellow light during displaying the caller identification information.

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8.    The method of claim 5, wherein displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available, further includes:

illuminating a third colored light, and

displaying the message on a readable display screen of the caller identification device.

· 9.    The method of claim 8, wherein illuminating a third colored light includes, illuminating a red light during displaying the message.

10.    The method of claim 9, wherein illuminating a third colored light includes, flashing a red light during displaying the message.

11. 12.    The method of claim 8, wherein displaying a message that no caller identification information associated with the call is available, further includes:

if caller identification information associated with the call is blocked from display, displaying an indication that the call is a private call; and

if caller identification information associated with the call is not located during querying a database for caller identification information associated with the call, displaying an indication that the call from an unknown calling area.

12. 13.    The method of claim 1, wherein displaying a first visual identification indicator, and displaying the caller identification information associated with the call, further includes:

flashing a light according to a first flashing sequence, and

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displaying the caller identification information on a readable display screen of the caller identification device.

13.14. The method of claim 13, wherein displaying a second visual identification indicator, and displaying the caller identification information associated with the call, further includes:

flashing a light according to a second flashing sequence, and

displaying the caller identification information on a readable display screen of the caller identification device.

14.15. The method of claim 14, wherein displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available, further includes:

flashing a light according to a third flashing sequence, and

displaying the message on a readable display screen of the caller identification device.

15.16. A method of providing visual caller identification in an Advanced Intelligent Network, including a switch, a service control point and a database of caller identification information, wherein the service control point is functionally connected to the switch, and wherein the method comprises the steps of:

receiving a call from a calling party at a calling party switch directed to a called party at a called party switch;

sending call information associated with the call to the service control point, the call information including the directory number of the calling party;

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at the service control point, querying the database of caller identification information for caller identification information associated with the call, and comparing the directory number of the calling party to one or more directory numbers saved by the called party;

comparing the directory number of the calling party with the one or more directory numbers saved by the called party;

sending the caller identification information to a called party caller identification device via the called party switch;

if one of the directory numbers saved by the called party matches the directory number of the calling party, displaying a first visual identification indicator, and displaying the caller identification information associated with the call;

if one of the directory numbers saved by the called party does not match the directory number of the calling party, displaying a second visual identification indicator, and displaying the caller identification information associated with the call; and

if no caller identification information associated with the call is obtained during the step of querying the database of caller identification information for caller identification information associated with the call, displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available.

16. The method of claim 16, wherein displaying a first visual identification indicator, and displaying the caller identification information associated with the call, further includes:

illuminating a first colored light, and

displaying the caller identification information on a readable display screen of the caller identification device.

*17.* ~~18.~~ The method of claim 17, wherein illuminating a first colored light includes, illuminating a green light during displaying the caller identification information.

*18* ~~19.~~ The method of claim 18, wherein illuminating a first colored light includes, flashing a green light during displaying the caller identification information.

*19* ~~20.~~ The method of claim 17, wherein displaying a second visual identification indicator, and displaying the caller identification information associated with the call, further includes:

    illuminating a second colored light, and

    displaying the caller identification information on a readable display screen of the caller identification device.

*202* ~~21.~~ The method of claim 20, wherein illuminating a second colored light includes, illuminating a yellow light during displaying the caller identification information.

*21* ~~22.~~ The method of claim 21, wherein illuminating a second colored light includes, flashing a yellow light during displaying the caller identification information.

*222* ~~23.~~ The method of claim 20, wherein displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available, further includes:

    illuminating a third colored light, and

displaying the message on a readable display screen of the caller identification device.

24. The method of claim 23, wherein illuminating a third colored light includes, illuminating a red light during displaying the message.

25. The method of claim 24, wherein illuminating a third colored light includes, flashing a red light during displaying the message.

26. The method of claim 23, wherein displaying a message that no caller identification information associated with the call is available, further includes:

if caller identification information associated with the call is blocked from display, displaying an indication that the call is a private call; and

if caller identification information associated with the call is not located during querying a database for caller identification information associated with the call, displaying an indication that the call from an unknown calling area.

27. A system for providing visual caller identification, comprising:

a software module operative

to query a database for caller identification information associated with a call from a calling party to a called party, the call being associated with a directory number;

to send the caller identification information to a caller identification device;

the caller identification device, operative

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to receive the call;

to store a plurality of directory numbers;

to compare the directory number associated with the call with the plurality of directory numbers;

if one of the plurality of directory numbers matches the directory number associated with the call, to display a first visual identification indicator, and to display the caller identification information associated with the call;

if one of the plurality of directory numbers does not match the directory number associated with the call, to display a second visual identification indicator, and to display the caller identification information associated with the call; and

if no caller identification information associated with the call is located during the step of querying a database for caller identification information associated with the call, to display a third visual identification indicator, and to display a message that no caller identification information associated with the call is available.

27.
28.    A method of providing visual caller identification, comprising the steps of:

receiving a call at a caller identification device; and

projecting information about the call onto a projection surface.

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~~29.~~    A method of providing visual caller identification, comprising the steps of:

saving a plurality of directory numbers;

saving visual projection information for each of the plurality of directory numbers;

receiving a call at a caller identification device;

querying a database for caller identification information associated with the call;

sending the caller identification information to a caller identification device;

comparing the directory number associated with the call with the plurality of directory numbers;

if one of the plurality of directory numbers matches the directory number associated with the call, projecting the saved projection information associated with the directory number onto a projection surface; and

if one of the plurality of directory numbers does not match the directory number associated with the call, projecting caller identification information associated with the call onto a projection surface.